The

AUSTRALIAN COMPUTER JOURNAL

VOLUME 20

February 1988 to November 1988

CONTENTS

Contributions

1. February,1988

Hawke, A.N. and Martin. C.D.	Expert Systems in Crisis Management: Ambulance Dispatch	1-9
Lakos, C.A.	Including an Explicit Memory Model in a Machine Description	10-18
Chung. T-C. and Cho, J-W.	An And-Parallel Dataflow Model for Logic Programs Based on Mode Prediction	19-26
Mili, F., Alaya, B. and Mili, A.	On the Analysis of Iterative and Recursive Programs	27-32
Lederer, B.R., Dakin, R.J., Parker, K.R., Cook, A.L.V.	CSIRONET's Terabit File Store	33-40

2. May,1988

Raymond, K. and Cook, R.	**Selected Papers from the Eleventh Australian Computer Science Conference: Guest Editors' Introduction**	49
Ashenden, P.J., and Marlin, C.D.	A Behavioural Specification of Cache Coherence	50-57
Vaughan, F.A., Marlin, C.D. and Barter, C.J.	A Distributed Operating System Kernel for a Closely-Coupled Multiprocessor	58-64
Altmann, R.A., Hawke, A.N. and Marlin, C.D.	An Integrated Programming Environment Based on Multiple Concurrent Views	65-72
Ang, C.C. and County, E.J.P.	An Experiment in Modelling Communication Protocols Using NPNs	73-78
Penny, J.P., Ashton, P.J. and Tripp, D.G.	Instrumenting Systems to Measure Components of Interactive Response Times	79-84
Zelinsky, A.	Robot Navigation with Learning	85-93

3. August,1988

Cook, R.	Editor's Introduction	97
Prabhakaran, N. and Falkenberg, E.	Representation of Dynamic Features in a Conceptual Schema	98-104
Colomb, R.M.	Table Searching Using a Content-Addressable Memory	105-112
Abramson, D.A. and Egan, G.K.	An Overview of the RMIT/CSIRO Parallel Systems Architecture Project	113-121
Anderson, M. and Wallace, C.S.	Some Comments on the Implementation of Capabilities	122-133
Marwood, W. and Clarke, A.P.	A Generic Time-Domain Beamformer Architecture	134-137
Low, G.C. and Hunt, D.C.	Multi-Vendor Local Area Networks: Some Technological Issues	138-144

Continued overleaf ...

Sager, M.T.	Data Centred Enterprise Modelling Methodologies - A Study of Practice and Potential	145-150
4. November,1988		
Thornton B.S., Goddard J., Park T.M. and Hughes J.M.	Staffing and Training Implications of Australian Software Export Targets	161-167
Caelli W.J.	**Special Issue - Electronic Funds Transfer Systems: Guest Editor's Introduction**	168-169
Kemp E.A.	Encryption in Electronic Funds Transfer Applications	170-177
Fernando L.	Contentious Issues in the Quest for EFT Security Standards	178-180
Frazer M.	The Development of VBARS: An Applied Expert System	181-187
Miscellaneous	Book Reviews	41-48,94-96,151-160,188-198
	Letter to the Editor	48
	Call for Papers - ISDN in Europe	57
	Call for Papers - ACSC 12	64
	Obituary - Ross Nealon	72
	Call for Papers - Eleventh International Joint Conference on Artificial Intelligence	133
	Call for Papers - 11th World Computer Congress	137
	Erratum	144
	Call for Papers - 3rd Pan-Pacific Computer Conference	198

TITLE INDEX

(Titles in italics are for book reviews.)

A Behavioural Specification of Cache Coherence	50-57	*An Introduction to Control and Measurement with Microcomputers*	194
A Computer for Each Student	46	*An Introduction to Programming in SIMULA*	43
A Distributed Operating System Kernel for a Closely-Coupled Multiprocessor	58-64	An Overview of the RMIT/CSIRO Parallel Systems Architecture Project	113-21
A First Course in Formal Logic and its Applications in Computer Science	44	*Annual Review of Computer Science (Volume 1, 1986)*	151
A Generic Time-Domain Beamformer Architecture	134-7	*Annual Review of Computer Science (Volume 2, 1987)*	151
A Practical Introduction to Standard Pascal	157-8	*APPLE II in the laboratory*	155
A Tutorial Introduction to Occam Programming	188	*Application Generators Using Fourth-Generation Languages*	42
An And-Parallel Dataflow Model for Logic Programs Based on Mode Prediction	19-26	*Artificial Intelligence and Information-Control Systems of Robots*	154
An Experiment in Modelling Communication Protocols Using NPNs	73-8	*Basic Programs for Chemical Engineers*	194
An Integrated Programming Environment Based on Multiple Concurrent Views	65-72	*BCPL and C*	47
		Building Expert Systems: Cognitive Emulation	96
		C: A Reference Manual	188-9
		CAL For Europe	196

Continued overleaf ...

Color and the Computer 197
Computer Assisted Learning in the Humanities and Social Sciences 45-6
Computer Capacity Planning: Theory and Practice 96
Computer Communications 47-8
Computer Cryptology 192
Computer ECG Analysis: Towards Standardisation 45
Computer Networks and Simulation III 159-60
Computer Strategies 1990-9 Technologies-Costs-Markets 154
Computers and Telecommunications Networks 47-8
Computers for Beginners 156-7
Concurrent Programming for Software Engineers 155-6
Contentious Issues in the Quest for EFT Security Standards 178-180
Crypto Users' Handbook 192-3
Cryptography: An Introduction to Computer Security 192-3
CSIRONET's Terabit File Store 33-40
Data Centred Enterprise Modelling Methodologies - A Study of Practice and Potential 145-50
Data Networks 47-8
Design Theory 43
Designing the User Interface Strategies for Effective Human-Computer Interaction 152-3
Desktop Publishing 197-8
Discrete Mathematics with Computer Science Applications 43-4
Distributed Algorithms and Protocols 198
Dr Dobb's Toolbook of 68000 Programming 43
Dr Dobb's Toolbook of C 94
Eco-Computer: The Impact of Global Intelligence 153
Editor's Introduction 97
Encryption in Electronic Funds Transfer Applications 170-77
Evaluation of Multicomputers for Image Processing 154
Expert Systems in Crisis Management: Ambulance Dispatch 1-9
Fourth Generation Languages Under DOS and UNIX 158
From Data to Database 41
Getting the most from utilities on the IBM PC 157
High-Tech Society: The Story of the Information Technology Revolution 153
How to Write Computer Documentation for Users (Second Ed) 152
Human and Machine Vision II 196
Including an Explicit Memory Model in a Machine Description 10-18
Information Online 86 95-6
Information Technology Atlas - Europe 152
Instrumenting Systems to Measure Components of Interactive Response Times 79-84
Introduction to Cryptology 192
Introduction to Data Communications and Computer Networks 47-8
Japanese Electronics Technology: Enterprise and Innovation 94
Language and Spatial Cognition 45
Logic and Computation 190-1
Logic Programming 190
Microcomputers in Secondary Education 195
Micros Plus: Educational Peripherals 195-6
Multi-Vendor Local Area Networks: Some Technological Issues 138-44
Natural Language Processing 191
Natural Language Understanding and Logic Programming, II 191-2
Nonlinear Parameter Estimation 155
Numerical Software Tools in C 95
Occam Programming: A Practical Approach 188
On the Analysis of Iterative and Recursive Programs 27-32
Operating System Design, Volume II: Internetworking with Xinu 156
Pascal for the Humanities 157-8
Pascal Simplified - A Guide for the First-Time User 42
Performance Measurement of Computer Systems 158-9
Program Construction 42
Program Design 41-2
Programming in C for Unix 94-5
Programming in Occam 2 188
Programs and Data Structures in C 160
Prolog Multiprocessors 189-90
Protocol Specification, Testing and Verification 156
Quantitative Analysis of Computer Systems 193-4
Reasoning about Change 191
Representation of Dynamic Features in a Conceptual Schema 98-104
Robot Navigation with Learning 85-93

Continued overleaf ...

Selected Papers from the Eleventh Australian Computer Science Conference: Guest Editors' Introduction 49
Software Reliability: Achievement and Assessment 197
Some Comments on the Implementation of Capabilities 122-33
Special Issue - Electronic Funds Transfer Systems: Guest Editor's Introduction 168-69
Speech Synthesis and Recognition 196-7
Staffing and Training Implications of Australian Software Export Targets 161-67
Strategic Value Analysis - A Modern Approach to Systems and Data Planning 46
Syntax Analysis and Software Tools 189
System Design for Human Development and Productivity: Participation and Beyond 95
Table Searching Using a Content-Addressable Memory 105-12
Telecommunication Networks 47-8
The Design of the UNIX Operating System 194-5
The Development of VBARS: An Applied Expert System 181-7
The Implementation of the Icon Programming Language 189
The Pick Operating System 44
The World's Best Computer Jokes 160
Towards Strategic Information Systems 41
Turbo Pascal: A Problem Solving Approach 157
UNIX Relational Database Management: Application Development in the UNIX Environment 193
UNIX Systems for Microcomputers 195

CONTRIBUTOR INDEX

Abramson, D.A. 113-21
Alaya, B. 27-32
Altmann, R.A 65-72
Anderson, M. 122-33
Ang, C.C. 73-8
Ashenden, P.J. 50-57
Ashton, P.J. 79-84
Baker, P.W. 157-8
Barter, C.J. 58-64
Brebner, P. 156-7
Butler, G. 44
Caelli W.J. 168-69
Celler, B.G. 45
Cheneau, C. 94-5
Cho, J-W. 19-26
Chubb, L. 152,156,194-5,197
Chubb, P.J. 94,189
Chung. T-C. 19-26
Clarke, A.P. 134-7
Coiera, E. 96,151,191
Collier, P.A. 190
Colomb, R.M. 105-12
Cook, A.L.V. 33-40
Cook, R. 49,97
County, E.J.P. 73-8
Crawford, F. 195
Crawford, J. 189
Dakin, R.J. 33-40
Dalglish, B. 155
Dekker, T. 190
Dunkley, J.G. 195
Dwyer B. 42
Egan, G.K. 113-21
Falkenberg, E. 98-104
Fernando L. 178-180
Frazer M. 181-7
Goddard J. 161-67
Hawke, A.N. 1-9,65-72
Hawkins, J. 188-9
Hawryszkiewycz, I.T. 41
Hesketh, T. 155
Hille, F. 43-4
Hiller, J.B. 41,95,152-3,158,193
Hughes J.M. 161-67
Hume, D. 196
Hunt, D.C. 43,138-44
Hurst, A.J. 189-90
Johnston, R.D. 194
Kay, J. 44
Kemp E.A. 170-77
King, R.W. 153,196-7
Kneipp, W. 191,191-2
Lakos, C.A10-18,159-60
Laribi, A. 95-6
Lawrence, L. 153
Lederer, B.R. 33-40
Lee Choo 155-6,157,194
Lichtenstein, S. 42
Lions, J. 46,47-8,151,152,160,198
Low, G.C. 138-44
Marlin, C.D. 1-9,50-58-64,65-72
Marwood, W. 134-7
Mathews, J. 197-8
McKerrow, P.J. 193-4
Mili, A. 27-32
Mili, F. 27-32
Newberry, M. 192,192-3
Park T.M. 161-67
Parker, K.R. 33-40
Peady, G.W. 95
Penny, J. 158-9,193-4
Penny, J.P. 79-84
Powers, D.M.W. 45
Prabhakaran, N. 98-104
Radonyi, P. 44
Raymond, K. 49,188
Rees, M.J. 43
Reeve, R. 46
Reid, T.A. 154,195-6
Rose, G.G. 192
Russell, A. 154
Sager, M.T. 145-50
Salzmann, E. 43
Shaw, E. 195
Smith, B.W. 45-6,196
Smith, D. 96
Thornton B.S. 161-67
Trahair, S. 41-2
Tripp, D.G. 79-84
Vaughan, F.A. 58-64
Wallace, C.S122-33,154
Werskey, G. 94
Whitehead, L. 42
Wilbur-Ham, M. 156
Wild, D. 157,160
Zelinsky, A. 85-93